WHAT IS CLAIMED IS:

1.   A method for provisioning routing policy of a plurality of sites of a Virtual Private Network (VPN), comprising:

enabling graphically defining of relationships between said plurality of sites of said VPN; and

automatically generating at least one routing rule for each site of said VPN based at least in part on said defined relationship.

2.   The method of claim 1, wherein automatically generating at least one routing rule comprises:

automatically generating at least one import rule;

automatically generating at least one local export rule; and

automatically generating at least one remote export rule.

3.   The method of claim 1, wherein automatically generating at least one routing rule for each site comprises generating an import rule for discarding route information received from the respective site.

4.   The method of claim 1, wherein automatically generating at least one routing rule comprises generating, for a site of said plurality of sites, an import rule for accepting route information, in response to said site being a member of a mesh VPN component, received from any site of said plurality of sites which is a member of said mesh VPN component.

5.   The method of claim 1, wherein automatically generating at least one routing rule comprises generating, for a site of said plurality of sites, an import rule for accepting route information, in response to said site being a hub of a hub-spoke VPN component, received from any site of said plurality of sites which is a member of said hub-spoke VPN component.

6. The method of claim 1, wherein automatically generating at least one routing rule comprises generating, for a site of said plurality of sites, an import rule for accepting route information, in response to said site being a spoke of a hub-spoke VPN component, received from any site of said plurality of sites which is a hub of said hub-spoke VPN component.

7. The method of claim 1, wherein automatically generating at least one routing rule comprises automatically generating at least one local export rule, wherein the number of local export rules generated is at least equal to the number of VPN components of said VPN that the respective site is a member of.

8. The method of claim 1, wherein automatically generating at least one routing rule comprises:

generating, for a site of said plurality of sites in response to said site being a member of a mesh VPN component, a local export rule for:

accepting routes from a Provider Edge-Customer Edge (PE-CE) routing protocol;

associating route information of said VPN to said accepted routes; and

advertising said accepted routes and said route information to all members of said mesh VPN component.

9. The method of claim 1, wherein automatically generating at least one routing rule comprises:

generating, for a site of said plurality of sites in response to said site being a hub of a hub-spoke VPN component, a local export rule for:

accepting routes from a Provider Edge-Customer Edge (PE-CE) routing protocol;

associating route information of said VPN to said accepted routes; and

advertising said accepted routes and said route information to all members of said hub-spoke VPN component.

10.   The method of claim 1, wherein automatically generating at least one routing rule comprises:

generating, for a site of said plurality of sites in response to said site being a spoke of a hub-spoke VPN component, a local export rule for:

accepting routes from a Provider Edge-Customer Edge (PE-CE) routing protocol;

associating route information of said VPN to said accepted routes; and

advertising said accepted routes and said route information to all members of said hub-spoke VPN component.

11.   The method of claim 1, wherein automatically generating at least one routing rule comprises:

generating, for a site of said plurality of sites in response to said site being a member of a VPN component, a plurality of local export rules for:

accepting routes from a Provider Edge-Customer Edge (PE-CE) routing protocol;

associating at least two sets of route information of said VPN to said accepted routes; and

advertising said accepted routes and said route information to members of said respective VPN component.

12.   The method of claim 1, wherein automatically generating at least one routing rule for each site comprises generating a remote export rule for not advertising route information received from a site which is a member of a VPN component to a site which is not a member of said VPN component.

13.   The method of claim 1, wherein automatically generating at least one routing rule for each site comprises generating, for a site of said plurality of sites in response to said site being a member of at least two VPN components, a remote export rule for advertising route information received from a site which is a member of a first VPN component of said at least two VPN components to at least one site which is not a member of said first VPN component.

14.   The method of claim 1, further comprising storing said at least one routing rule in a database.

15.   A system for provisioning routing policy of a plurality of sites of a Virtual Private Network (VPN), comprising:

a graphical user interface, comprising:

a display area graphically displaying at least one VPN component of said VPN; and

a customer area displaying said plurality of sites, at least one of said plurality of sites operable to be dragged from said customer area to said display area, wherein dropping of said at least one site on a graphical representation of said at least one VPN component causes said at least one site to be displayed in said display area and to become a member of said VPN component.

16.   The system of claim 15, further comprising means for automatically generating at least one routing rule for each site of said plurality of sites based at least in part on a membership of said respective site.

17.   The system of claim 16, further comprising means for distributing said respective generated routing rule to a respective one of said plurality of sites of said VPN component.

18.   The system of claim 17, further comprising means for processing, by each site, route information received from said plurality of sites based at least in part on said at least one routing rule generated for said respective site.

19.   The system of claim 18, further comprising means for establishing routing relations between said plurality of sites based at least in part on said processed routing information.

20.   The system of claim 15, further comprising a database operable to store said at least one routing rule.

21.   A method for provisioning routing policy of a plurality of sites of a Virtual Private Network (VPN), comprising:

graphically displaying at least one VPN component of said VPN;

enabling dragging of a representation of at least one site of said plurality of sites towards said at least one VPN component;

enabling dropping of said representation of said at least one site on said representation of said at least one VPN component thereby causing said site to become a member of said VPN component; and

automatically generating at least one routing rule for each site of said plurality of sites based at least in part on a membership of said respective site.

22.   The method of claim 21, further comprising storing said at least one routing rule and route information received from said plurality of sites in a database.

23.   The method of claim 22, wherein said route information comprises at least one route information item selected from the group consisting of a Route Distinguisher (RD), a Route Target (RT), a Site of Origin (SOO), a VPN ID, an Internet Protocol version 4 (IPv4) Prefix, and Next Hop Information (NH).

24.   The method of claim 22, wherein said route information is denoted by a 6-tuple

{RD, RT, SOO, VPN_ID, IPv4 Prefix, NH}, wherein RD denotes a Route Distinguisher, RT denotes a Route Target, SOO denotes a Site of Origin, VPN_ID denotes a VPN ID, IPv4 Prefix denotes an Internet Protocol version 4 prefix, and NH denotes Next Hop Information.

25.   The method of claim 24, wherein automatically generating at least one routing rule comprises generating a routing rule for discarding route information received from site s1, said routing rule being denoted as

mask {0, 0, 1, 0, 0, 0}, value{0, 0, s1, 0, 0, 0}, action = reject.

26.   The method of claim 24, wherein automatically generating at least one routing rule comprises generating a routing rule for accepting route information comprising a specified Route Target rt1, said second routing rule being denoted as

mask {0, 1, 0, 0, 0, 0}, value{0, rt1, 0, 0, 0, 0}, action = permit.

27.   The method of claim 24, wherein automatically generating at least one routing rule comprises:

automatically generating at least one local export rule and at least one remote export rule, said at least one local export rule and said at least one remote export rule being generically denoted by:

mask {0|1, 0|1, 0|1, 0|1, 32 bit mask for IPv4 Prefix, 0|1}, Value {*, *, *, *, *, *}, action = reject|accept with {RD, RT, SOO, VPN_ID, = , NH}.